

surrounding properties, and ~~provide controls for the conservation of natural resources, and rehabilitation or reclaim the land.~~

**11.110.2. Applicability.** This Section applies to ~~any~~ sand and gravel ~~mineral~~ extraction and processing activity ~~or processing~~ including any removal, stockpiling, or processing of ~~for~~ construction materials, including stone, sand, gravel, aggregate, or similar naturally occurring construction materials. Any screening, crushing, gravel recycling, washing or stockpiling of aggregate, in concert with extraction, constitutes a sand and gravel operation. A sand and gravel operation that affects ten (10) or more acres of land, extracts or processes more than twenty-thousand (20,000) tons of material, or utilizes blasting is considered a Large Scale Sand and Gravel Operations and shall be subject to this Chapter ~~section~~. A ~~S~~sand and ~~G~~Gravel operation that affects ~~ten~~ ten (10) or fewer acres of land, extracting or processing less than twenty-thousand (20,000) tons of material, and does ~~not~~ utilize blasting shall ~~not~~ be subject to this Chapter, and shall be regulated under Section 10.19 (Small Scale Sand and Gravel Extraction). ~~the extraction and processing of any sand and gravel extraction operation that affects ten (10) or more acres of land, or extracts or processes more than twenty thousand (20,000) tons of earth materials, or utilizes blasting. Sand and Gravel operations affecting ten (10) or fewer acres of land, extracting or processing less than twenty thousand (20,000) tons of material, or not utilizing blasting are not applicable to this Chapter and are regulated under Section 10.19 (Small Scale Sand and Gravel Extraction).~~ One or more ~~s~~Small, incremental increases of an approved sand and gravel extraction operation by the same owner or operator that is subject to Section 10.19 that causes the operation to exceed the thresholds in effectively avoid the application and approval requirements of this ordinance ~~section~~ are prohibited without a DCI Conditional Use Permit. No person, including an applicant, operator, ~~or~~ owner, or corporate officer, whether individually or on behalf of such person, as an agent or corporate officer of any business entity, who has been granted an approval to operate a sand and gravel ~~extraction~~ operation of less than ~~ten~~ ten (10) acres of land, ~~or~~ less than ~~twenty-thousand~~ twenty-thousand (20,000) tons of earth material, or that does not utilize blasting shall be granted approval to operate a new sand and gravel operation or to an expanded ~~or similar extraction~~ that operation or another sand and gravel extraction or processing operation on the same, ~~or~~ contiguous, or nearby property, where the total of any additional ~~if the combined operations increases the extraction operation to one in excess of~~ would affect more than ~~ten~~ ten (10) acres of land, ~~or to one in excess of~~ process more than ~~twenty-thousand~~ twenty-thousand (20,000) tons of earth material, or utilize blasting, except as: ~~Instead, any such additional operation shall be treated as~~ authorized by a DCI Conditional Use Permit ~~a DCI~~ and shall require application and processing under this Ordinance.

**11.10.3.** Sand and gravel extraction and processing includes any removal, stockpiling, or processing of any material identified in the definition of sand and gravel. Any screening, crushing, gravel recycling, washing, or stockpiling of aggregate, in concert with extraction, constitutes a gravel operation.

**11.110.34.** This Section ~~11.7.7~~ does not apply to:

**11.110.34.1.** Excavation ~~related to~~ of a basements and footings ~~for~~ of a building; ~~or retaining walls.~~

**11.110.34.2.** Sand and gravel operations that are less than 10 acres in size and extract less than 20,000 tons of earth materials and which do not utilize blasting, are regulated by Section 10.19 of this SLDC. Excavation for retaining walls; or

**11.110.34.3.** Mineral Exploration and Resource Extraction and Processing regulated by County Ordinance 1996-10, Article III, Section 5 pursuant to Section 11.14.

**11.11.4. Application Requirements.** In addition to other applicable requirements in this Chapter, the applicant shall provide:



11.11.4.1. Project description. The Applicant shall provide a detailed statement describing the operation, including:

1. the amount and type of materials to be excavated;
2. the duration of the excavation activity and reclamation activity;
3. the proposed method of excavation;
4. the amount of fill to remain on site; and
5. a statement from a Professional Engineer indicating the type of material(s) to be excavated and their suitability for road and structural fill construction.

---

**11.11.4.2. Blasting Plan.**

1. The plan shall be created by a qualified blasting firm which is knowledgeable of State of New Mexico requirements and National Fire Protection Association (NFPA) 495 (Explosive Materials Code).
2. The blasting plan shall identify the maximum number of holes to be shot each occurrence, the type of explosive agent, maximum pounds per delay, method of packing, type of initiation device to be used for each hole, and blasting schedule, and establish reasonable noise and vibration estimates not exceeding the standards set in Table 11.2.
3. The County may hire a qualified blasting firm to review the Applicant's blasting plan at the expense of the Applicant.

11.11.4.3. Closure Plan. The Applicant shall submit closure and post-closure plans with the application, and shall update the plan no later than one (1) year prior to the commencement of closure. The plans shall be based on the findings of the EIR, and shall identify a Professional Engineer, approved by the Administrator, who shall be responsible for implementation of the plans. All facilities not required to ensure compliance with the standards and requirements of the SLDC, this Chapter, and the DCI Conditional Use Permit shall be removed. Following the completion of closure, the Professional Engineer shall prepare a final report describing the actions taken by the Permittee, the results of closure and post-closure monitoring, and a certification that the DCI Overlay Zoning District after closure will comply with all applicable standards in perpetuity.

**11.110.55. Operational Standards and Requirements.**

~~11.10.5.1. State and Federal Permits.~~ All sand and gravel extraction operations shall submit all required state permits, FEMA and/or Army Corps of Engineers permits with the Conditional Use Permit application.

~~11.110.5.15.2. Hours of Operation.~~ Hours of operation are limited to the period between sunrise or 7:00 a.m. whichever is latest, and sunset or 6:00 p.m., whichever is earliest, Monday through Saturday. The Administrator may recommend and the Board may impose further restrictions on hours per Section 11.10.5.4.5 of this SLDC of operation Ordinance.

~~11.110.5.25.18. Sand and Gravel Operation Setbacks.~~

~~1. A sand and gravel operation shall not be located setback; closer than five hundred~~

~~a. (500) feet from all property boundaries lines;~~

~~b. 500 feet from all public road rights-of-way, public recreational easements, and waterbodies and or seasonal water courses, environmentally sensitive lands; and~~

~~c. One-half (1/2) mile from residential structures, shall maintain an additional minimum buffer of one hundred (100) feet of natural vegetation between the operation and the annual high water mark of any waterbody.~~

~~2. Vegetation within the setbacks from the property boundary shall be preserved and supplemented, as necessary, for mitigation of negative impacts. Existing native vegetation on the entire operation site shall be preserved to the maximum extent possible~~

~~11.10.5.3. Water Services Availability. A Water Service Availability Report shall be submitted with the application per Section 6.5 (Water Service Availability Report) of the SLDC.~~

~~1. Extraction and filling of a reservoir shall not infringe on downstream appropriator's water rights.~~

#### ~~11.10.5.4. Project Traffic Impacts and Road Standards.~~

~~1. All roads carrying sand and gravel related traffic shall conform to the requirements of Section 7.11 (Road Design Standards) of the SLDC.~~

~~2. Transportation Facility Improvements. An analysis of all roads accessing the site shall be submitted to the County with detailed information concerning the ability of the roads to adequately support the projected traffic, including potential weight of vehicles for 20 years or the life of the sand and gravel extraction operation. Cost of all required improvements, on and off site, shall be borne entirely by the applicant.~~

~~3. The Board of County Commissioners may establish a maximum size and number of truck trips allowed to enter and exit a processing location where needed to:~~

~~a. avoid a reduction in the level of service for all access roads and roads within the study area as provided in the Traffic Impact Analysis (TIA) the time of application;~~

~~b. avoid the deterioration of all access roads; and~~

~~c. otherwise comply with Section 6.6 of the SLDC.~~

~~4. Traffic Counts. Traffic counts at the entrance of the operation shall be presented at the annual review of the operation's permit.~~

~~5. Designation of Construction and Haul Routes. The application shall designate proposed truck haul and traffic routes that shall be subject to limitation by the BCC, which proposal shall:~~



~~a. avoid residential areas, commercial areas, environmentally and visually sensitive areas, schools and other civic buildings, municipalities, and already congested locations where possible;~~

~~b. identify alternative routes;~~

~~c. identify the timing of truck haul traffic; and~~

~~d. include a fugitive dust plan for designated routes to prevent loss of loads and fugitive dust during transportation;~~

~~**11.10.5.5. Project description.** The applicant shall provide a detailed statement describing the project including:~~

~~1. The amount and type of materials to be excavated;~~

~~2. Duration of the excavation activity and reclamation activity;~~

~~3. The proposed method of excavation;~~

~~4. The amount of fill to remain on site; and~~

~~5. A statement from a New Mexico professional engineer indicating the type of material(s) to be excavated and their suitability for road and structural fill construction.~~

~~**11.10.5.6. Access.** Adequate and available access is required per Section 7.4 (Access and Easements) of the SLDC.~~

~~**11.10.5.7. Visual Screening Measures.** Visual screening, which shall include all phases, is required per Section 7.6 (Landscaping and Buffering) of the SLDC plus the following standards:~~

~~**1. General.** The view from all public roads, rivers, parks, open space and adjoining residential areas shall be screened.~~

~~**2. Buildings.** The design, scale, and location of all buildings shall reduce the visibility from off site.~~

~~**3. Surrounding Vegetation.** Any vegetation on site that can act as screening of the extraction area shall be preserved, including vegetation existing in the required setbacks.~~

~~**4. For all proposed extraction areas of greater than 10 acres, the extraction shall be designed in phases in order to minimize the visual impact.**~~

~~**11.10.5.8. Lighting.** All Sand and Gravel operations must comply with Section 7.8 (Lighting) of the SLDC.~~

~~**11.10.5.9. Signs.** All sand and gravel operations must comply with Section 7.9 (Signs) of the SLDC, a sand and gravel operation shall have no more than but are limited to two (2) signs of four (4) square feet each.~~



11.110.55.42. Blasting Permit.

~~— If a proposed operation intends to do anyA blasting, a blasting permit shallmust be obtained before any blasting can occur.~~

1. A blasting plan must be included in an application for a blasting permit.

~~— 2. The plan shall be created by a qualified blasting firm which is knowledgeable of State of New Mexico requirements and National Fire Protection Association (NFPA) 495.~~

1.

23. BBlasting shall may only be conducted only during the permitted hours of operation.

3. Blasting shall be conducted by a person who has been trained, examined, and certified by the Director of the Mining and Minerals Division of the Energy, Minerals and Natural Resources Department.

4. The blasting plan shall identify the maximum number of holes to be shot each occurrence, the type of explosive agent, maximum pounds per delay, method of packing, type of initiation device to be used for each hole, blasting schedule and establish reasonable noise and vibration estimates not exceeding the standards set in Table 11.2.

45. TThe Permitteeapplicant shall notify the AdministratorCounty and, upon request, the owners and lessees of adjoining properties of the proposed blasting no less than ten (10) working days prior to a blast, and shall provide the name of the qualified blasting firm and proof of insurance of no less than one million dollars (\$1,000,000)-dollars for each occurrence.

6. The County may hire a qualified blasting firm to review the applicant's blasting plan at the expense of the applicant.

7. The operator shall require that any blasting be conducted by someone who has been trained and examined and who holds certification issued by the Director of the Mining and Minerals Division of the Energy, Minerals and Natural Resources Department.

11.10.5.10. Parking and Loading. All Sand and Gravel operations must comply with Section 7.10 (Parking and Loading) of the SLDC.

11.10.5.11. Hazardous Materials. Any fuel, explosives, or other hazardous materials stored on the site shall be contained within a lined impoundment structure designed by a registered New Mexico professional engineer.

~~11.10.5.12. Wildlife.~~ Protection is required for critical environmental resources including wetlands, riparian areas, and important wildlife habitats.

~~1. Any modification of the terrain within a floodplain area shall be environmentally sound and not result in net loss of wildlife habitat.~~

~~2. All sand and gravel operations shall be limited to locations and times of year that ensure no significant negative impacts to federally listed endangered species.~~

~~3. No sand and gravel development shall interrupt a wildlife corridor.~~

~~**11.10.5.13. Protection of Historic and Archaeological Resources.** Any application for sand and gravel extraction shall submit an archaeological report conforming to the requirements of Section 7.16 (Protection of Historic and Archaeological Resources) of the SLDC.~~

~~**11.10.5.14. Terrain Management.** Requirements of Section 7.17 (Terrain Management) of the SLDC shall be met.~~

~~**1. Grading and Erosion/Sediment Control.** In addition to the Terrain Management requirements of the SLDC, drainage and erosion control shall comply with the following:~~

~~**a. Removal of Organic Materials.** Fill areas shall be properly prepared by removing organic materials, such as vegetation and rubbish, and any other material which is detrimental to the proper compaction of the site or not otherwise conducive to the stability of the site.~~

~~**b. Site Vegetation Removal and Revegetation.** The removal of existing vegetation shall not occur more than 30 days prior to the commencement of grading; however, permanent revegetation shall be commenced as soon as practical after the completion of grading. Site specific native seed mixtures shall be used to revegetate all disturbed areas with the exception of lawn and landscaped areas if any. Mulching shall be used in order to assure vegetation growth.~~

~~**c. Topsoil, Stripping, Stockpiling, and Redistribution.** The existing topsoil shall be stripped and stockpiled on site for redistribution over the completed final grade.~~

~~**d. Cut and Fill Slopes.** Cut and fill slopes shall be graded to a slope no steeper than 2:1, or 50%, to allow for permanent revegetation or landscaping unless a retaining wall is used or a steeper slope is approved by the County. The County may require the submission of a detailed engineering report and analysis prepared by a professional engineer or landscape architect relative to the safety of such cuts and fills, if necessary considering soil type, soil stability, and any proposed structures.~~

~~**2. Sediment and Erosion Control.** Practices for sediment and erosion control shall be designed, constructed and maintained to mitigate further entry of sediment to streams, lakes, ponds, or any land outside the permit area. Where applicable, sediment and erosion control measures to prevent degradation of the environment shall be instituted and consist of utilization of proper reclamation methods and sediment control practices including, but not limited to:~~

~~**a.** grading material to reduce the rate and volume of run off;~~

~~**b.** retaining sediment within the pit and disturbed area; and,~~

~~**c.** establishing temporary vegetation or mulch on short term erosion, sedimentation or windblown dust.~~

#### **11.10.5.15. Air Quality and Noise.**

~~**1.** The requirements of Section 7.21 (Air Quality and Noise) of the SLDC shall be met; however, only a preliminary air quality report is required for submittal with the application. Once approved, a final air quality permit is required prior to commencement of any activity on the site.~~

~~**2. Noise Study.** A noise study showing the projected noise from the specific equipment to be used is required to be submitted with the application. Such noise study shall provide a baseline of three consecutive~~



~~weekdays representative of non excavation activities.~~

~~3. Fugitive Dust Control.~~ Dust control is required for all active sand and gravel extraction operations:

~~a. The presence of dust at a sand and gravel operation is attributable to earth moving, soil or surface disturbance, construction or demolition; movement of motorized vehicles on any paved or unpaved roadway or surface, right of way, lot or parking area; and the tracking out or transport of bulk material (i.e., sand, gravel, soil, aggregate, or any other inorganic or organic material capable of creating fugitive dust related to extraction activities) onto any paved or unpaved roadway in Santa Fe County.~~

~~b. Fugitive dust consists of airborne particulate matter from a source, resulting in particulate matter emissions that can be detected by the human eye.~~

~~c. Dust control measures include but are not limited to the use of wet suppression through manual or mechanical application; the use of fabric fencing material or equivalent that shall be a minimum of 24 inches in height and anchored 6 inches below the surface on the bottom edge installed around the perimeter of the disturbed surface area; the use of dump truck tarps; and the use of chemical dust suppressant applied in amounts, frequency, and rates recommended by the manufacturer.~~

~~d. In no circumstances shall a sand and gravel operator continue extraction operations during a high wind event.~~

~~e. All sand and gravel operations shall incorporate an entry/exit apron, steel grates, or other equivalent devices capable of removing bulk material from the tires of vehicle traffic.~~

~~f. An applicant for a sand and gravel Conditional Use Permit shall submit a fugitive dust control plan as part of the application. The fugitive dust plan must detail the control measures the operator intends to use to reduce the quantity of visible fugitive dust, transported material, temporary cessation of activity during a high wind event and track out leaving the property or area under the control of the operator.~~

11.10.5.17. Monitoring Report.

5. The Permitteeapplicant shall monitor all blasting and record all noise and vibration levels, and report this information in a monitoring report. The monitoring report shall be submitted to the Land Use Administrator within five (5) working days of the blasting occurrence

6. The Permitteeor shall comply with the following ground vibration and noise levelsstandards:

a1. Ground vibration shall not exceed 0.50 inches per second Peak Particle Velocity (PPV) at any property boundaryline, unless the adjoining such property is owned by the operator and not leased to any other person.

b2. Noise levels shall not exceed the values specified in Table 11-2 below:

Table 11-2 Maximum Allowable Noise Levels.

| <u>Lower frequency limit of measuring system, Hz + 3dB</u> | <u>Maximum level in dB</u> |
|--|----------------------------|
| <u>0.1 Hz or lower—flat response</u>                       | <u>134 peak</u>            |

|                                      |                 |
|--------------------------------------|-----------------|
| <u>2.0 Hz or lower—flat response</u> | <u>133 peak</u> |
| <u>6.0 Hz or lower—flat response</u> | <u>129 peak</u> |

~~11.10.5.16. **Blasting Plan.** If a proposed operation intends to do any blasting, a blasting plan shall be submitted with the application and for any future blasting after the initial blast and a blasting permit must be obtained.~~

- ~~1. An application for a blasting permit must be included in the blasting plan.~~
- ~~2. The plan shall be created by a qualified blasting firm which is knowledgeable with State of New Mexico requirements and National Fire Protection Association (NFPA) 495.~~
- ~~3. Blasting may only be conducted during the hours of operation in Section 11.10.5.2 above.~~
- ~~4. The blasting plan shall identify the maximum number of holes to be shot each occurrence, the type of explosive agent, maximum pounds per delay, method of packing, type of initiation device to be used for each hole, blasting schedule and establish noise and vibration standards.~~
- ~~5. The applicant shall notify the County of proposed blasting ten working days prior to a blast and shall provide the name of the qualified blasting firm and provide insurance of \$1,000,000 for each occurrence.~~
- ~~6. The County may hire a qualified blasting firm to review the applicant's blasting plan at the expense of the applicant (see Appendix A).~~
- ~~7. The operator shall require that any blasting be conducted by someone who has been trained and examined and who holds certification issued by the Director of the Mining and Minerals Division of the Energy, Minerals and Natural Resources Department or the Director's designee. Comparable certification from another state is acceptable.~~

~~11.10.5.17. **Monitoring Report.** The applicant shall monitor all blasting and record all noise and vibration levels in a monitoring report. The monitoring report shall be submitted to the Land Use Administrator within five (5) working days of blasting and shall comply with the following ground vibration and noise levels:~~

- ~~1. Ground vibration shall not exceed 0.50 inches per second Peak Particle Velocity (PPV) at any property line, unless such property is owned by the operator and not leased to any other person.~~
- ~~2. Noise levels shall not exceed the values specified in Table 11-2 below:~~

~~Table 11-2 Maximum Allowable Noise Levels~~

|  |                                |
|--|--------------------------------|
| <del>Lower frequency limit of measuring system, Hz + 3dB</del> | <del>Maximum level in dB</del> |
|--|--------------------------------|



|  |                     |
|--|---------------------|
| <del>0.1 Hz or lower flat response</del> | <del>134 peak</del> |
| <del>2.0 Hz or lower flat response</del> | <del>133 peak</del> |
| <del>6.0 Hz or lower flat response</del> | <del>129 peak</del> |

~~11.10.5.5. Project description. The applicant shall provide a detailed statement describing the project including:~~

- ~~1. The amount and type of materials to be excavated;~~
- ~~2. Duration of the excavation activity and reclamation activity;~~
- ~~3. The proposed method of excavation;~~
- ~~4. The amount of fill to remain on site; and~~
- ~~5. A statement from a New Mexico professional engineer indicating the type of material(s) to be excavated and their suitability for road and structural fill construction.~~

~~11.10.5.18. Sand and Gravel Operation Setbacks:~~

~~1. Sand and gravel operations shall be setback;~~

~~a. 500 feet from all property lines;~~

~~b. 500 feet from all public road rights of way, public recreational easements, and environmentally sensitive lands; and~~

~~c. One half mile from residential structures.~~

~~2. Vegetation within the setbacks from the property boundary shall be preserved and supplemented, as necessary, for mitigation of negative impacts. Existing native vegetation on the entire operation site shall be preserved to the maximum extent possible~~

~~11.10.5.19. Protection From Trespassing.~~ The proposed use shall be fenced in accordance with the standards in Section 7.7. (Fences and walls) of the SLDC for health and safety protection.

~~11.10.5.20. Height.~~ Any equipment used for sand and gravel extraction must meet the height standards for the zoning district in which it is located. Height shall be measured from existing grade prior to commencement of any grading activity on the site, and shall also conform to the height measurement requirements of Section 7.17.9.3 of the SLDC.

~~11.10.5.21. Activities in or Near Water Bodies.~~

~~1. Uncontrolled/Natural Watercourses.~~ When working near uncontrolled, or naturally flowing, watercourses, the proposed operation shall be conducted in a manner that neither disturbs nor degrades fisheries and waterfowl habitat. This requirement shall apply to any water body, which shall include: naturally occurring rivers, streams, ponds, lakes, seasonal streams and seasonal lakes.

~~2. Minimum Buffer.~~ A minimum 100 foot buffer of natural vegetation between the water's edge and any sand and gravel operation is required.

~~3. No Negative Impact.~~ No extraction is permitted that is deemed by the County to have a negative impact on any water body.

~~11.10.5.22. Solid Waste.~~ All sand and gravel operations must comply with Section 7.20 (Solid Waste) of the SLDC.

~~11.10.5.23. Liquid Waste.~~ All sand and gravel operations must comply with the wastewater requirements of Section 7.13 (Water Supply, Wastewater and Water Conservation) of the SLDC.

~~11.10.5.24. Phasing.~~ All phases shall be clearly staked prior to commencement of any activity on the property. The applicant must GPS all stakes and make them digitally available to the County upon request in GIS format based on the standard Santa Fe County GIS spatial reference.

~~1. The maximum size of any phase of the development shall be ten acres.~~

~~2. Only one phase of the development shall be excavated at a time.~~

~~11.10.5.25. Reclamation Plan and Bonding.~~ A reclamation plan shall be provided that is designed and certified by a New Mexico registered professional engineer or landscape architect, and meets the reclamation standards specified below in Section 10.3.25. The plan shall restrict extraction operations to areas of workable size so that no area is left inactive and unreclaimed for more than 60 days, unless approved by the DCI Permit. The plan shall specify any phasing of reclamation and estimate the cost of the entire reclamation project. A bond shall be posted to implement the reclamation plan at 125% of expected cost of the reclamation. The bond amount shall be reviewed annually, as part of the annual review of the DCI Permit, for the purpose of up dating the bond amount in accordance with any changing costs of reclamation. The reclamation plan does not replace a landscape plan that may be required for any subsequent development of the gravel processing and extraction site.



~~11.10.5.26. Reclamation Standards. The reclamation plan shall comply with the following standards:~~

~~1. General. Reclamation shall restore land areas to a condition suitable for new land uses. Wildlife habitat shall be restored in a manner comparable or better, to the habitat conditions that existed prior to the gravel operation. In general, all slopes shall be graded to 3:1 or flatter to promote revegetation.~~

~~2. Grading. Disturbed areas shall be re-graded to blend into and conform to the general natural form and contours of the adjacent areas. In general, all slopes (cut or fill) shall be graded to 3:1 or flatter. Such methods must be approved as part of the Reclamation Plan.~~

~~3. Revegetation of all disturbed areas is required. The plan shall describe the vegetation prior to any grading of the site and shall demonstrate how the site will be returned to its original, or better vegetated condition.~~

~~4. Mining operations shall be allowed to progress so long as the disturbed areas within previous phases have been reclaimed within 6 months after the commencement of the new phase; provided that, the County will consider extensions due to weather conditions and taking into account seasonal changes. Reclamation shall commence within 30 days of the commencement of a new phase of extraction.~~

~~5. Prior to Approval of Reclamation Study. In no case shall a location and time of excavation be approved that may have negative impacts on any state or federally designated endangered or threatened species, or critical habitat.~~

~~11.10.5.27. Existing Sand and Gravel Extraction Uses. Any sand and gravel extraction use existing prior to adoption of the Land Development Code (January 1, 1981) and having been in continuous operation, may continue operations and may expand up to 25% beyond the area currently and formerly mined on that parcel. Any sand and gravel extraction use approved by the County prior to the adoption of this Ordinance may continue operations in accordance with their final County approvals. Any new phase or further expansion proposed, but not previously approved, shall comply with this Ordinance.~~

~~11.10.5.28. Annual Operating Plan and Monitoring Report~~

~~1. An annual operating plan and monitoring report, capable of audit, shall be prepared and submitted to the Land Use Administrator by January 31st each year. The report shall summarize the operations of the previous year including number of truck trips and sizes of trucks, the area mined, quantities mined in tonnage and cubic yards, the amount of area undergoing reclamation, and the success of reclamation including any violations issued and their outcome.~~

~~2. For the first three years, the report shall be reviewed at a public hearing with the Board of County Commissioners. After the third year, the Board may allow the report to be reviewed administratively by the Land Use Administrator and brought to the Board when the Land Use Administrator has determined a significant change in operations has occurred, or circumstances have changed warranting re-evaluation of the DCI permit.~~

~~11.10.5.216. Blasting Permit. If a proposed operation intends to do any blasting, a blasting plan shall be submitted with the application and for any future blasting after the initial blast and a blasting permit~~



must be obtained before any blasting can occur;

1. A blasting plan must be included in an application for a blasting permit must be included in the blasting plan.

2. The plan shall be created by a qualified blasting firm which is knowledgeable of with State of New Mexico requirements and National Fire Protection Association (NFPA) 495.

3. Blasting may only be conducted during the permitted hours of operation in Section 11.10.5.2 above.

4. The blasting plan shall identify the maximum number of holes to be shot each occurrence, the type of explosive agent, maximum pounds per delay, method of packing, type of initiation device to be used for each hole, blasting schedule and establish reasonable noise and vibration estimates not exceeding the standards set in Table 11.2;

5. The applicant shall notify the County and, upon request, the owners and lessees of adjoining properties of the proposed blasting no less than ten (10) working days prior to a blast, and shall provide the name of the qualified blasting firm and provide of insurance of no less than one million (\$1,000,000) dollars for each occurrence.

6. The County may hire a qualified blasting firm to review the applicant's blasting plan at the expense of the applicant. (see Appendix A);

7. The operator shall require that any blasting be conducted by someone who has been trained and examined and who holds certification issued by the Director of the Mining and Minerals Division of the Energy, Minerals and Natural Resources Department, or the Director's designee. Comparable certification from another state is acceptable.

#### **11.121. REGULATIONS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS-LARGE-SCALE FEEDLOTS AND FACTORY FARMS.** Reserved.

**11.132. -REGULATIONS FOR OIL AND GAS DRILLING AND PRODUCTION.** See County Ordinance No. 2008-19.

#### **11.14 REGULATIONS FOR MINERAL RESOURCE EXTRACTION AND PROCESSING.**

11.14.1. Purpose; Intent. This Section establishes operational, location, and general standards for Mineral Resource Exploration and Extraction and Processing, in addition to Sections 11.1 through 11.7, in order to:

11.14.1.1. To protect the health, safety and welfare of the citizens of the County, including their quality of life, economy, cultural heritage, history and traditions, infrastructure and natural resources, including air, water, wildlife and scenic beauty;

11.14.1.2. To protect the citizens and environment of the County from harmful, hazardous, and toxic effects and nuisances resulting from Mineral Resource Exploration and Extraction and Processing, including the degradation of air quality, surface and ground water quality and quantity, visual quality, soil erosion and land subsidence, noise and vibration, fire and explosion hazards, traffic, road impact safety and deterioration, and other potential effects;



11.14.1.3. To protect wildlife, wildlife corridors, wildlife habitat, and native biological diversity;

11.14.1.4. To protect the scenic quality of the County, which is critically important to its economy, from the potentially adverse effects of Mineral Resource Exploration and Extraction and Processing; and

11.14.1.5. To assure that public roads and utilities required for Mineral Resource Exploration and Extraction and Processing are adequately funded, built, improved, and maintained;

11.14.1.6. To assure that Mineral Resource Exploration and Extraction and Processing are compatible with other uses in the County, including traditional patterns of land use and development, recreational uses, and existing or planned urban or metropolitan areas;

11.14.1.7. To assure that the remediation and reclamation and closure of areas used or affected by Mineral Resource Exploration and Extraction and Processing complies with the requirements and standards of the SLDC and this Chapter;

11.14.1.8. To assure that sufficient Financial Assurance is provided to cover all potential costs of impacts associated with Mineral Resource Exploration and Extraction and Processing, remediation, and reclamation, and to protect the County's taxpayers from bearing any cost related to mineral resource extraction and processing;

11.14.1.9. To provide the Applicant with notice of the process and issues that affect the County's review and decision regarding proposals to conduct Mineral Resource Exploration and Extraction and Processing; and

11.14.1.10. To provide for a fair and efficient system for the regulation of Mineral Resource Exploration and Extraction and Processing.

**11.14.2. Applicability.** This Section applies to all Mineral Resource Exploration and Extraction and Processing in the County.

11.14.2.1. All requirements of this Chapter shall apply to Mineral Resource Exploration and Extraction and Processing except when this Section establishes a more stringent requirement, in which case the more stringent requirement shall be applicable.

11.14.2.2. Mineral Resource Extraction and Processing on state or federal land shall be subject to this Chapter except to the extent prohibited by law. The Applicant bears the burden to demonstrate that a provision of this Chapter is prohibited, provided that such provision shall be construed and applied to avoid such effect.

11.14.2.3. A person may not engage in Exploration without first obtaining the Board's approval of a DCI Overlay Zoning District, including an exploration permit. An Applicant may obtain an exploration permit by submitting an exploration plan with its application for a DCI Overlay Zoning District. The Board may approve an exploration permit if the Applicant demonstrates that the proposed Exploration meets the provisions, standards and criteria of Sections 11.5, 11.8, 11.14.3 and 11.14.6, to the extent applicable. The Administrator may recommend, and the Board may impose reasonable conditions on an exploration permit.

11.14.2.4. No application for a permit to extract or process any uranium mineral or other radioactive mineral shall be considered until the County adopts a regulation for such activity that protects the public health, safety, and welfare, and the environment.

11.14.3. Design Criteria. A DCI Conditional Use Permit for Mineral Extraction and Processing shall not be issued unless the Applicant demonstrates compliance with these design criteria:

11.14.3.1. Mineral Resource Extraction and Processing shall not cause or contribute to the contamination or depletion of a water resource, in perpetuity;

11.14.3.2. All facilities shall be designed to withstand, at a minimum, the peak flow of a one thousand (1,000) year twenty-four (24) hour storm event with a twenty-five percent (25%) safety factor based on National Oceanic and Atmospheric Administration (NOAA) data for the area within the DCI Zone Overlay District;

11.14.3.3. All aspects of Mineral Resource Extraction and Processing shall be designed with water conservation as a primary concern;

11.14.3.4. Active or continuous treatment of water, air, or soil shall not be used for any purpose including to address any noncompliance with a standard, requirement, or criterion of the SLDC or this Chapter;

11.14.3.5. Compliance with any control measure to protect air, water, or soil, including any standard, requirement, or criterion of the SLDC or this Chapter, shall not be used to demonstrate compliance with these design criteria; and

11.14.3.6. All designs, including any alterations to designs, shall be certified by a Professional Engineer.

11.14.4. Application Requirements. In addition to the general requirements for DCI Conditional Use Permits, an application for Mineral Resource Extraction and Processing shall contain the following:

11.14.4.1. Applicant. The name, mailing address and telephone number of the Applicant;

11.14.4.2. Surface and Mineral Estates. A map showing surface and mineral ownership of the Mineral Resource Extraction and Processing and the land in the DCI Overlay Zone District, including the name, mailing address, and telephone number of each owner of each surface and mineral estate as shown by the most recent county assessor's property tax schedule;

11.14.4.3. Right of Entry. Proof of the applicant's right to enter onto and conduct Mineral Resource Extraction and Processing in the DCI Overlay Zone District;

11.14.4.4. State and Federal Permits. All relevant state and federal permits, including permits related to the protection of threatened and/or endangered species; and

11.14.4.5. Historic Land Use. A description of the present and historic land use in or within five (5) miles of the property boundaries of the DCI Overlay Zone District, including any existing or previous Mineral Resource Extraction and Processing, the land use in the area adjacent to the DCI Overlay Zone District and the area of proposed Mineral Resource Extraction and Processing, and the land capability, productivity and soils based on classifications published by the U.S. Soil Conservation Service.



#### 11.14.4.6. Project Description.

1. a description of the type and method of proposed Mineral Extraction and Processing, including the mining and engineering techniques, the commodities to be produced, and other minerals that may be incidentally extracted, processed, or exposed;

2. a description of any abandoned or existing mines within five (5) miles of the property boundaries of the DCI Overlay Zone District;

3. a map at a scale approved by the Administrator that complies with the requirements of Section 11.5.8;

4. a description, map, and schedule of construction and operation, including the location and number of acres of land involved, for all facilities, including but not limited to:

a. leach pads;

b. stockpiles;

c. dumps;

d. impoundments;

e. ponds;

d. diversions;

e. disposal systems;

f. pits;

g. tailings disposal facilities;

h. mills;

i. water treatment facilities;

j. air emission equipment;

k. storage areas;

l. topsoil and topdressings storage;

m. staging areas; and

n. other facilities or structures.

11.14.4.7. Baseline Data Report. A baseline data report describing the existing environment of the DCI Overlay Zoning District as specified below. The data shall be collected over a period of not less than twelve (12) consecutive months as applicable. Prior to collecting a category of baseline data, the applicant shall submit SAPs described in Section 11.7.2.2. The report shall include the following:

1. the climatological factors, including precipitation, prevailing winds, temperature, and current NOAA data defining the one thousand (1,000) year storm event for the DCI Overlay Zoning District;
2. a topographic map showing the boundaries, location of all structures within one-half (1/2) mile, and all man-made features, at a scale of 1-inch equals 2000 feet (1:24,000) or as approved by the Administrator, and in paper and GIS formats following the requirements of Section 11.5.7;
3. a description and map showing existing vegetation types, including cover, density, and productivity, and, if the vegetation on site has been adversely impacted by previous activities, a description and map based on information from adjacent areas;
4. a description and map showing existing wildlife, including types, communities, and populations, and, if the wildlife on site has been adversely impacted by previous activities, a description and map based on information from adjacent areas;
5. state and federally listed sensitive, threatened or endangered plant species on the site and immediately adjacent properties;
6. state and federally listed sensitive, threatened or endangered wildlife species on the site and immediately adjacent properties;
7. a description and map showing cultural and archaeological sites and traditional cultural properties, including sites on or eligible for listing on the National Register of Historic Places or the State Register of Cultural Properties, including a statement describing the Applicant's consultation with potentially affected tribes;
8. the topsoil, including its physical and chemical characteristics, suitability for reclamation, and depth and characteristics of A, B, and C horizons, if applicable;
9. the geology and mineralogy of each ore body and surrounding rock, including cross-sections of overburden, mineralized zones, and ore bodies; and
10. surface water and ground water:
  - a. a description and map showing the location and physical parameters of watersheds and surface waters, including streams, lakes, reservoirs, springs, watercourses, and riparian and wetland areas, classified as perennial, ephemeral, or intermittent;
  - b. a description and map showing the location and physical parameters of ground water, including depth, total dissolved solids, water chemistry, flows, gradients, transmissivity and storage capacity;
  - c. a description and map showing the location and physical parameters of man-made water features, including acequias, irrigation canals, sumps, and drains;
  - d. a description and map showing wells within two (2) miles of the property boundaries of the DCI Overlay Zoning District;



e. a description and map showing the surface and bedrock geology with cross sections clearly illustrating the lithologic units, structures, faults, fractures, mineralized zones, and water table, including whether a unit, structure, fault, fracture, or zone is water bearing, and the amount of water, variation in amount during the sampling period, flow, gradient, transmissivity, storage capacity, and collection area therein; and

f. a description and map showing the ownership of water rights in surface and ground water in the DCI Overlay Zoning District.

---

**11.14.4.8. Contaminated Baseline and Legacy Uses.** In the event that baseline conditions do not meet the standards of this Chapter and the SLDC, the Applicant shall submit a plan to remediate those conditions to acceptable levels prior to or concurrent with the commencement of Mineral Resource Extraction and Processing, provided however that the Board may exempt such remediation from the active treatment clause in Section 11.14.3.5. In the event that the DCI Overlay Zoning District contains a legacy mine or historic mining site, the Applicant shall submit a plan to reclaim the site on a phased schedule.

**11.14.4.9. Environmental Impact Report.** In addition to the requirements of Section 11.7.1.8, the Applicant shall submit additional information describing the environmental conditions expected to occur during and after Mineral Resource Extraction and Processing, including construction, operation, reclamation, post-reclamation, and conditions during and after a one thousand (1,000) year storm event based on NOAA data for the area within the DCI Overlay Zoning District, using geological, meteorological, hydrological, geochemical, and mineralogical modeling for each baseline described in Section 11.14.4.7, including:

1. the characteristics of each material to be extracted, processed, stored, deposited, exposed, or disposed, including waste rock, raw and spent ore, tailings, pits, walls, and underground workings;
2. the potential and nature of geochemical alteration of each material to be extracted, processed, stored, deposited, exposed, or disposed that could result in the leaching, acid generation, emission, or release of an air or water contaminant;
3. the nature and extent of sulfide mineralization, potential for acid generation, and any other geochemical alteration related to each material to be extracted, processed, stored, deposited, exposed, or disposed; and
4. the hydrologic effect, including any geochemical alteration, sulfide mineralization, and acid generation, related to construction, operation, reclamation, and post-reclamation, as demonstrated by cross sections and 3D models showing the location of pads, stockpiles, ponds, pits, walls, and underground workings, and other related features, potential fracturing in the geologic subsurface and their relation to the water table, hydrology, and mineralization.

**11.14.4.10. Stormwater.** A description of the proposed method for the management and disposal of stormwater runoff from disturbed and undisturbed ground to prevent clean water from entering any area containing a material that has been extracted, processed, stored, deposited, exposed, or disposed, and that captures any water that contacts a material that has been extracted, processed, stored, deposited, exposed, or disposed.

11.14.4.11. Sediment. A description of the proposed method for reduction and control of sediment transport.

11.14.4.12. Wastewater. A description of the proposed method for disposal of domestic waste, including the location and design of septic tanks and leachfields.

11.14.4.13. Solid Waste. A description of the proposed method for management and disposal of domestic and industrial solid waste, including the implementation of best practices for minimization and recycling.

11.14.4.14. Extraction and Processing. A description and map showing the proposed mining method, milling method, disposal of waste rock and tailings, and existing and proposed facilities, including:

1. open pit and underground mining facilities, including location, depth, size, acreage, and geology;
2. material handling and processing facilities, including crushing, milling, concentrating, smelting and solvent extraction and electrowinning;
3. ancillary facilities, including sumps, tanks, pipelines, transportation, and offices. The description shall include the location, purpose, construction material, and dimensions and capacity;
4. storage and disposal facilities, including tailing, process water, and stormwater impoundments, drainage channels, leach pads, waste rock stockpiles, and slag and residue piles. The description shall include the location, purpose, liner material, and storage or disposal capacity; and
5. process and domestic water, including the location, construction method and material, dimension and capacity of wells, meters and pipes.
6. A mass balance table describing the quantity of each type of material mined or disturbed each year, including but not limited to soil, overburden, barren waste (less than 0.1% sulfur), waste, ore, tailings, and quantities of material disturbed for roads and site grading into and out of stockpiles.

---

11.14.4.15. Storage, Disposal, and Maintenance of Ore, Tailings, Waste Rock, and High Walls. A plan for handling each material extracted, processed, stored, deposited, exposed, or disposed, and each facility proposed for such use, in a manner that will not cause or contribute to the contamination of surface or ground water in perpetuity, signed and sealed by a Professional Engineer, taking into consideration the amount, intensity, duration, frequency of precipitation, and the watershed area, including the topography, geomorphology, soils, and vegetation.

11.14.4.16. Operating Plan. A plan describing the procedures for operating the facilities for Mineral Resources Extraction and Processing, including:

1. a schedule of anticipated periods of temporary cessation, including holidays or anticipated regular maintenance;
2. notification of appropriate regulatory authorities of temporary cessations, both scheduled and unscheduled;



3. a description of processes for containing leachate and runoff from materials that have been extracted, processed, stored, deposited, exposed, or disposed;

4. a description of processes and protocols for managing all fluids in the operation, including routine inspections of each facility;

5. a protocol for managing the facilities and fluids during emergencies and non-routine operations, temporary cessation, and closing, including:

a. emergency by-pass and containment procedures for each facility, including treatment facilities damaged or unable to keep up with demand;

b. procedures to cease operations during emergencies and non-routine operations;

c. labor requirements, including management and security, to cease operations and manage facilities during emergency and non-routine operations;

d. identification of potential hazards, including the generation and release of Hazardous Materials, during emergency and non-routine operations

e. monitoring plan to identify and characterize Hazardous Materials generated or released during emergency and non-routine operations;

f. pump energy usage;

g. estimated cost to cease operations and manage facilities during emergencies or non-routine operations;

h. Health and Safety Plan complying with Mine Safety and Health Administration requirements; and

i. procedures to stabilize facilities and return to regular operations.

**11.14.4.17. Blasting Plan.** A plan created by a qualified blasting firm or engineer which is knowledgeable of State of New Mexico requirements and National Fire Protection Association NFPA 495 (Explosive Materials Code), which identifies the maximum weight of explosives to be detonated on each occurrence, the type of explosive agent, maximum pounds per delay, method of packing, type of initiation device to be used for each hole, blasting schedule and noise and vibration limits not exceeding the standards set in Table 11.2.

**11.14.4.18. Monitoring Plan.** In addition to the requirements of Section 11.8.11, the Applicant shall submit a Monitoring Plan, including Quality Assurance/Quality Control ("QA/QC") procedures, describing the collection and evaluation of data to ensure compliance with the standards of this Chapter and the SLDC, including:

1. representative samples of each material extracted, processed, stored, deposited, exposed, or disposed;

2. representative samples of ground and surface water, including each point of potential contact with a material that could leach, generate, or release a water contaminant;

3. hydrological tests to evaluate changes in flow, gradient, and water table; and

4. monitoring of operations to detect leaks and ensure proper function of facilities.

**11.14.4.19. Wildlife Impact Mitigation Plan.** The Applicant shall submit a Wildlife Impact Mitigation Plan developed by a professional biologist with expertise in wildlife impact mitigation and approved by the Administrator. The plan shall describe how wildlife impacts attributable to the proposed DCI will be eliminated or mitigated to the greatest extent possible.

**11.14.4.20. Closure and Post-Closure Plans.** The Applicant shall submit Closure and Post-Closure Plans, and shall update the plans annually. The plans shall be certified by a Professional Engineer approved by the Administrator. Following closure, a Professional Engineer shall prepare a final report describing the actions taken by the Permittee, the results of closure and post-closure monitoring, and a certification that the DCI Overlay Zoning District will comply with all applicable standards in perpetuity. The plans shall demonstrate compliance with the following standards:

**1. Removal.** All facilities not required to ensure compliance with the standards and requirements of the SLDC, this Chapter, and the DCI Conditional Use Permit shall be removed.

**2. Secondary Containment Systems.** Liner systems shall be tested for any potentially contaminating materials, remediated to comply with Section 11.14.3, and removed.

**3. Leach (Spent Ore and Lean Ore) Facilities.** Materials in leach facilities shall be detoxified using rinse/rest cycles and chemical oxidation. Following detoxification, leach facilities shall be closed by covering the materials as specified in Section 11.14.9.4, ponds associated with a heap-leach facility shall be closed by folding in the synthetic liners and filling and contouring the pits with inert material, residual sludge, spent ore, and lean ore shall be removed and disposed in an approved facility, and piping shall be removed.

**4. Cover Systems.** Cover systems shall be installed on waste rock piles, leach and spent ore facilities, tailing impoundments, and any other unit that has the potential to yield a contaminant, which is capable of containing the contaminant in perpetuity:

a. the cover system shall be constructed of thirty-six (36) inches of earthen materials that are capable of sustaining plant growth without perpetual care and have erosion resistant characteristics. The pile shall be shaped to be geomorphologically stable. Erosion rates shall be equal to or less than stable slopes in the surrounding area after the vegetation has reached near-equilibrium cover levels;

b. the cover system shall have the capacity to store within the fine fraction at least ninety-five (95) percent of the long-term average winter precipitation (December, January and February) or at least thirty-five